

SIEMENS

UROSKOP Access

SP

Planning Guide

System

UROSKOP Access (e)

© Siemens AG 2001

The reproduction, transmission or use of this document or its contents is not permitted without express written authority. Offenders will be liable for damages. All rights, including rights created by patent grant or registration of a utility model or design, are reserved.

English

Doc. Gen. Date: 11.05

Print No.: SPL5-330.891.01.06.02

Replaces: SPL5-330.891.01.05.02

Chapter	Page	Revision
all	all	01
all	all	02
all	all	03
all	all	04
all	all	05
all	all	06

Document revision level

The document corresponds to the version/revision level effective at the time of system delivery.

Revisions to hardcopy documentation are not automatically distributed.

Please contact your local Siemens office to order current revision levels.

Disclaimer

The installation and service of equipment described herein is to be performed by qualified personnel who are employed by Siemens or one of its affiliates or who are otherwise authorized by Siemens or one of its affiliates to provide such services.

Assemblers and other persons who are not employed by or otherwise directly affiliated with or authorized by Siemens or one of its affiliates are directed to contact one of the local offices of Siemens or one of its affiliates before attempting installation or service procedures.

	Page
1 General Notes	1-1
General Notes	1-1
Safety	1-2
Further Information for Detail Planning	1-2
UROSKOP Access	1-3
2 Room Planning	2-1
Room Planning Example I.	2-1
Room Planning Example II	2-2
UROSKOP Access	2-3
Left-hand Version	2-3
UROSKOP Access	2-4
Right-hand Version	2-4
Installation of the Tabletop Extension	2-5
Image System	2-6
System Console (Option)	2-7
Upper Body Radiation Shield (Option)	2-8
Upper Body Radiation Shield (Option)	2-9
Ceiling Fixpoint	2-9
3 Preparation for Installation	3-1
Installation Notes	3-1
General Remarks	3-1
General Remarks	3-1
System-external Power Cables	3-1
Unit Base Static Requirements (Left-hand Version)	3-2
Unit Base Static Requirements (Right-hand Version)	3-3
On-site Installation Shaft, Cable Fixpoints for Water Installation, Cable Outlets (Left-hand Version)	3-4
Water Installation (On-site), Left-hand Version	3-5
On-site Installation Shaft, Cable Fixpoints for Water Installation, Cable Outlets (Right-hand Version)	3-7
Water Installation (On-site), Right-hand Version	3-8
Contacts in PL-SX 65/80 Generator Cabinet for External Connections	3-10
Contacts in PL-SX 65/80 Generator Cabinet for External Connections	3-11
On-site Electrical Installation	3-12
SIEMENS Remote ServiceTM (SRS)	3-14
The virus protection hospital network	3-15
DICOM	3-15
4 System Connections	4-1
Remarks Regarding Laying Cables	4-1
Overview of Fixpoints, UROSKOP Access	4-2

	Page
Fixpoint List, UROSKOP Access	4-3
List of Fixpoints Used	4-3
5 Technical Data	5-1
Electrical Data	5-1
Weights and Heat Dissipation	5-1
Environmental Conditions	5-1
Packaging and Transport Routes	5-2
Surface Paint Colors	5-2
6 Transport Specifications	6-1
Transport Carriage (Unit Support)	6-1
Transport Carriage (Base)	6-2
Transport Route	6-3
7 Changes to Previous Version	7-1

General Notes

- With distribution of these revision level, all preceding planning guides, Speed Infos (PGs) and drafts lose their validity.
- All layouts issued by the Planning Departments must bear a note referring to the installation and delivery conditions of Siemens Medical Engineering. The installation and delivery conditions must be submitted with the layouts.
- Unless otherwise specified, all dimensions are indicated in "mm".
- ◆ - The symbol indicates a change (see revision status).
- - Orientation points
Points specific to system components to which reference is made when positioning system components to each other or in the room.
The isocenter of a radiographic system is always illustrated as the orientation point.
- Fixpoints
Clearly marked points on system components, installation ceiling, walls or floor on which cable outlets are located.
Illustration in the drawings: octagon with letter/number-combination.
The cable lengths specify the maximum fixpoint distances and thus the maximum distances between the individual system components.
- Room height
The room height is the distance measured from the top surface of the floor to the bottom surface of the ceiling structural elements (Unistrut rails) (bottom surface of drop ceiling).
- Room lighting
According to DIN 68 68-57 (international standard in preparation), the lighting in rooms in which image playback devices (monitors) are used for diagnosis, the following requirements must be met:
 - adjustable, no anti-glare screen, reproducible adjustment of the lighting (e.g. dimmer with scale),
 - no glare or reflection from windows, lights and light boxes in the standard working position of the monitors.

Hotline + 49 (9191) 18 - 8080

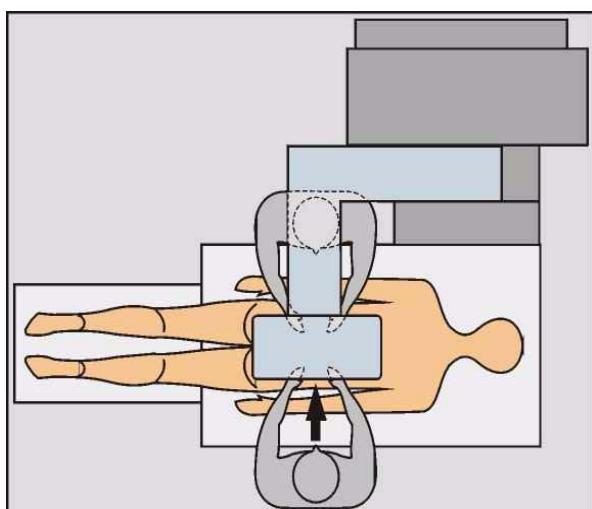
Safety

- The provisions of the relevant fire safety regulations must be observed for the premises.
- The system has been developed according to EN 60601 - 1.
- Minimum dimensions (e.g. room heights, safety distances) indicated in the planning guides are marked "min."
- Basic strength against electromagnetic sources of interference.
Result of lightning discharges.
The protection targets of the different lightning protection areas up to the unit connection are also specified in the IEC 1024, DIN 48810, VDE 0675 and in the DEMVT recommendations.

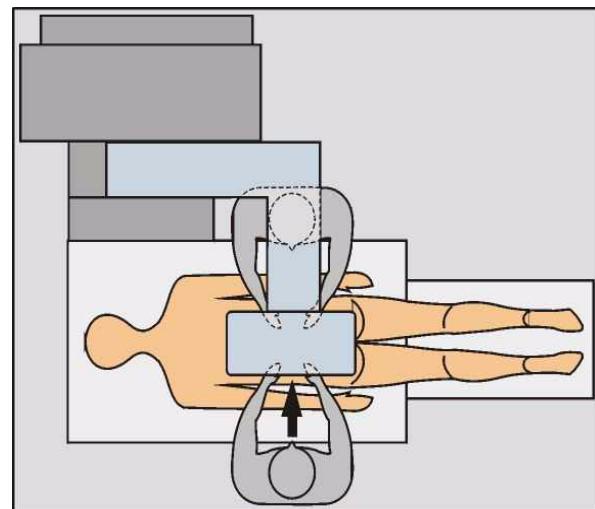
Further Information for Detail Planning

- PG: POLYDOROS SX 65/80
RX63-065.021.01...

UROSKOP Access



Left-hand version

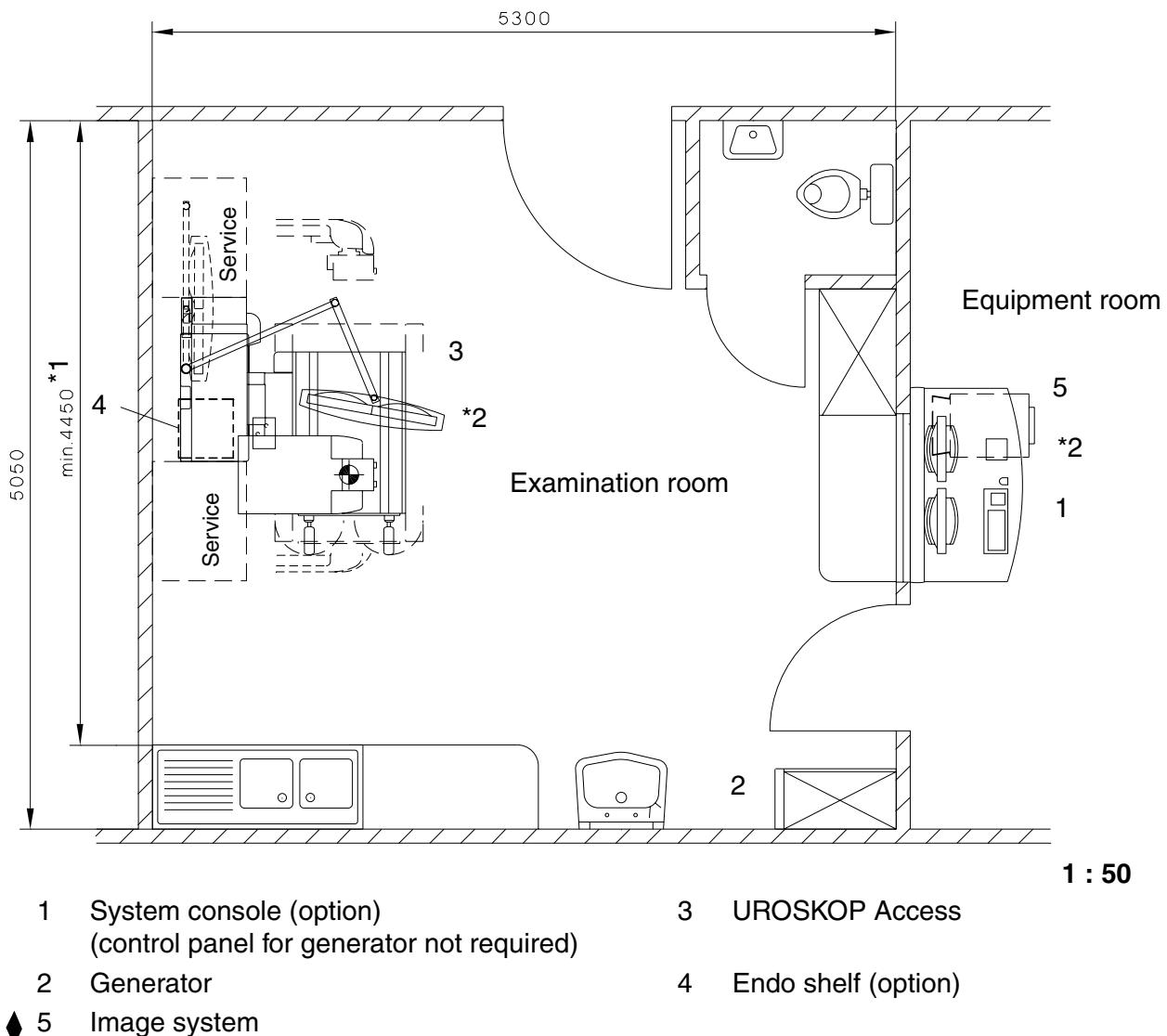


Right-hand version

This page intentionally left blank.

Room Planning Example I

Left-hand Version



*1 This dimension takes into consideration installation of the tabletop extension on the left or right and a safety distance of 500 mm, see Page 2-3

*2 Recommendation:

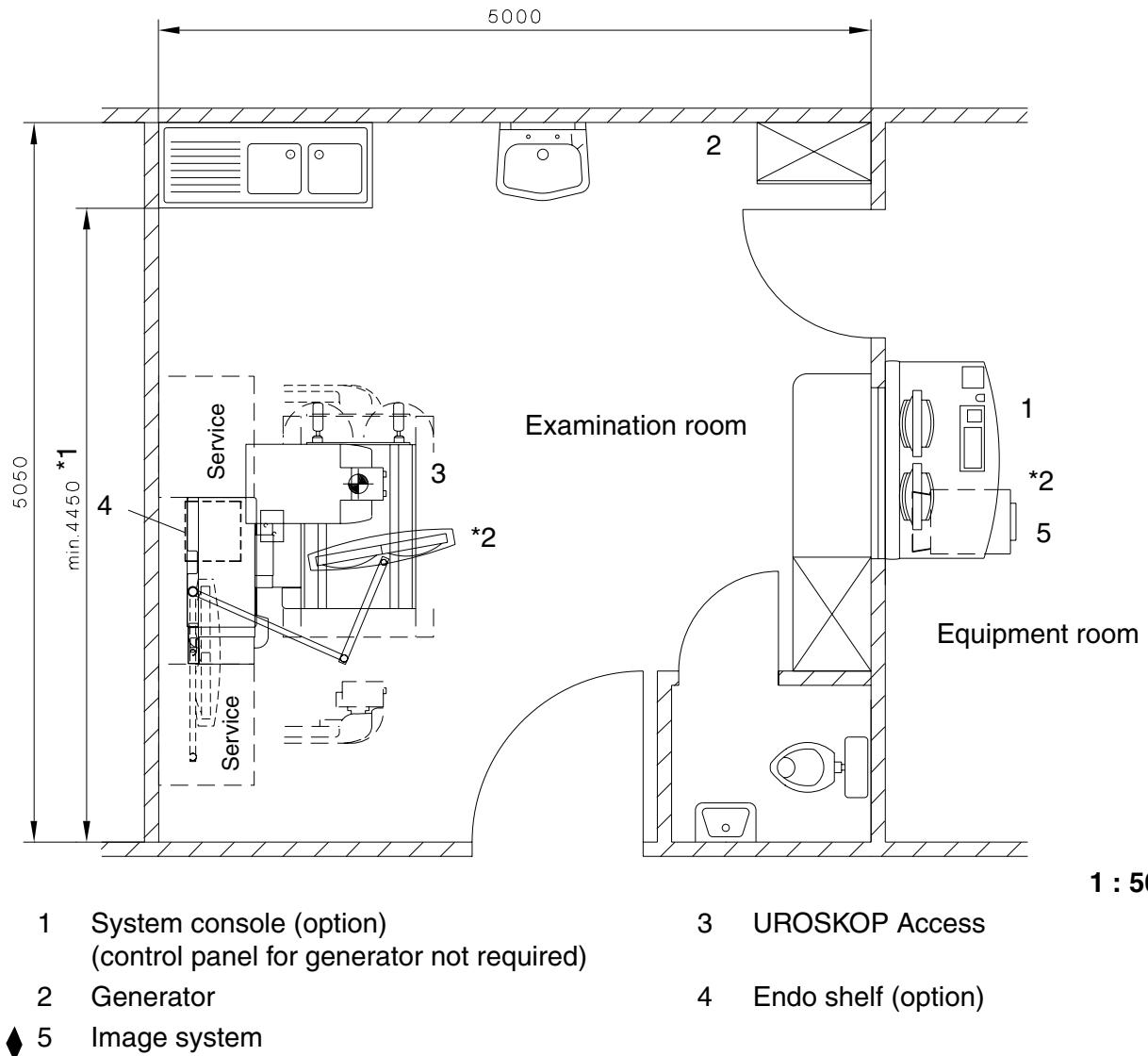
For good evaluation of the X-ray image, the ambient light in dimmed operation may not be more than 10-30 lux in front of the monitors (above the table).

Room Size

	Area	Length	Width	Height
Examination room size	26.76 m ²	5.05 m	5.30 m	min. 2.50 m

Room Planning Example II

Right-hand Version



*1 This dimension takes into consideration installation of the tabletop extension on the left or right and a safety distance of 500 mm, see Page 2-4

*2 Recommendation:

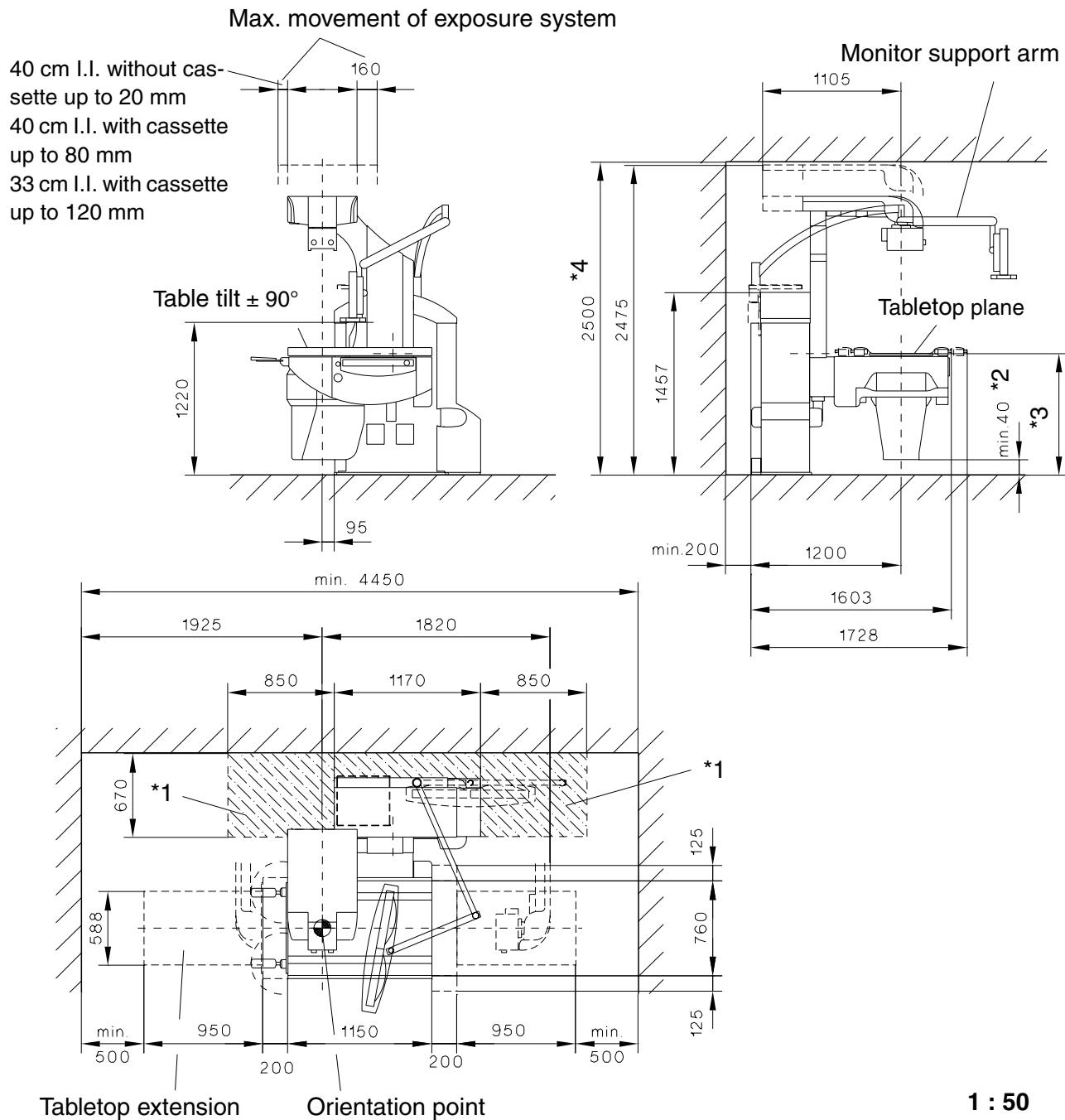
For good evaluation of the X-ray image, the ambient light in dimmed operation may not be more than 10-30 lux in front of the monitors (above the table).

Room Size

	Area	Length	Width	Height
Examination room size	26.76 m ²	5.05 m	5.30 m	min. 2.50 m

UROSKOP Access

Left-hand Version



*1 Service area must be kept free

*2 from top edge of finished floor

*3 40 cm I.I. without cassette 860 - 1220 mm
40 cm I.I. with cassette 920 - 1220 mm
33 cm I.I. with cassette 780 - 1220 mm
(33 cm I.I. possible only with cassette)

*4 RH with limitation of unit movement

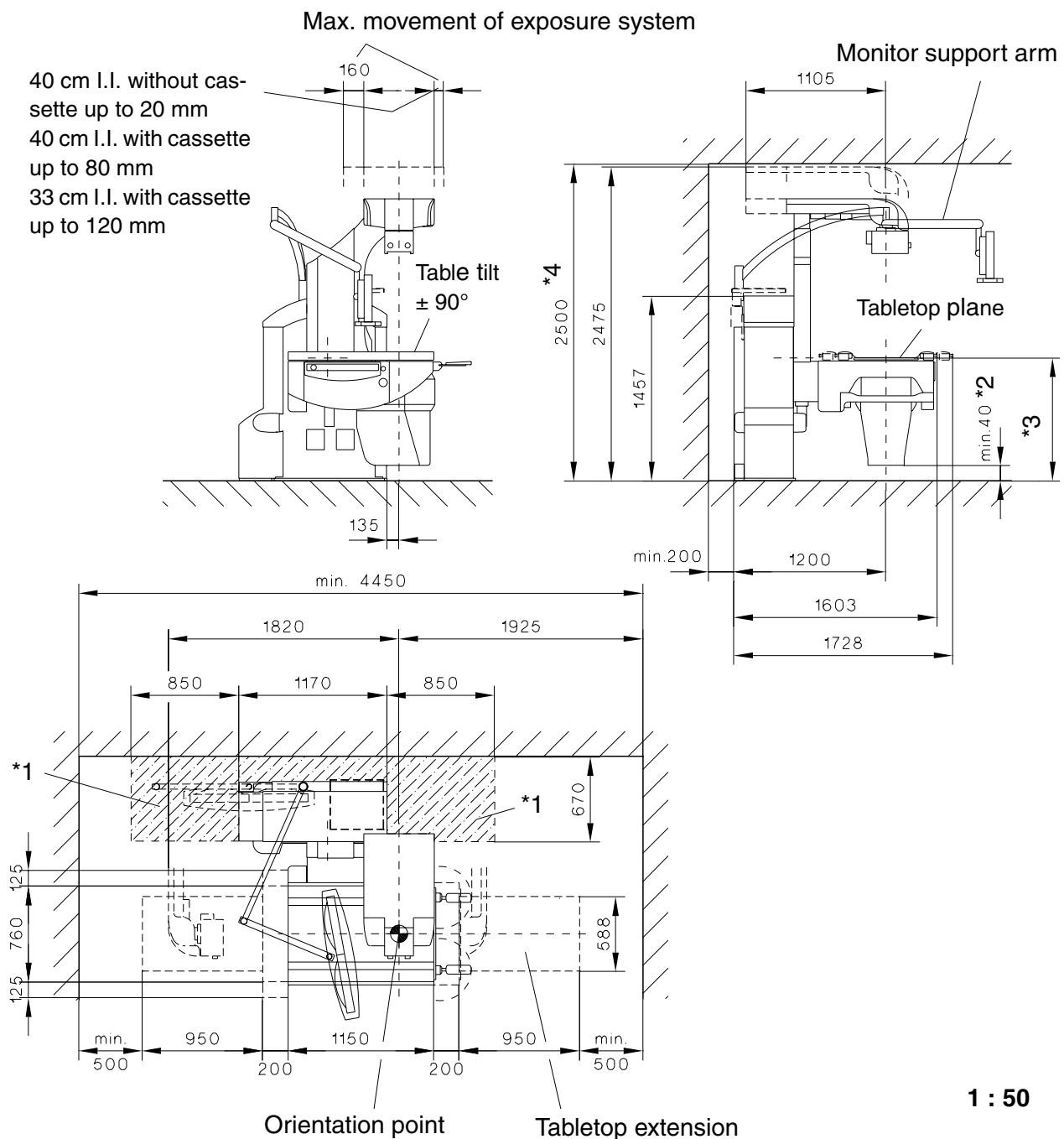
≥ 2500
2501-2799

RH without limitation of unit movement

≥ 2800

UROSKOP Access

Right-hand Version



*1 Service area must be kept free

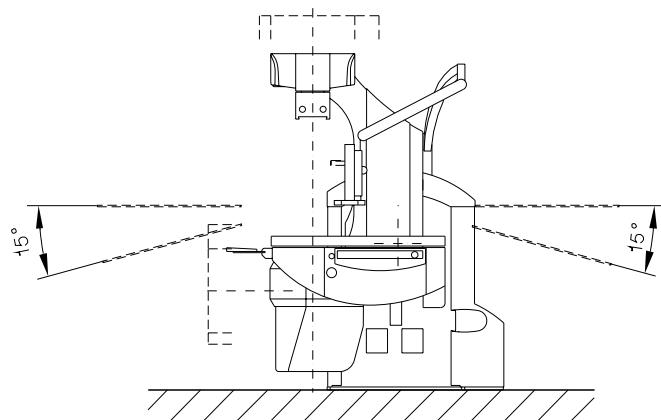
*2 from top edge of finished floor

- *3 40 cm I.I. without cassette 860 - 1220 mm
- 40 cm I.I. with cassette 920 - 1220 mm
- 33 cm I.I. with cassette 780 - 1220 mm
- (33 cm I.I. possible only with cassette)

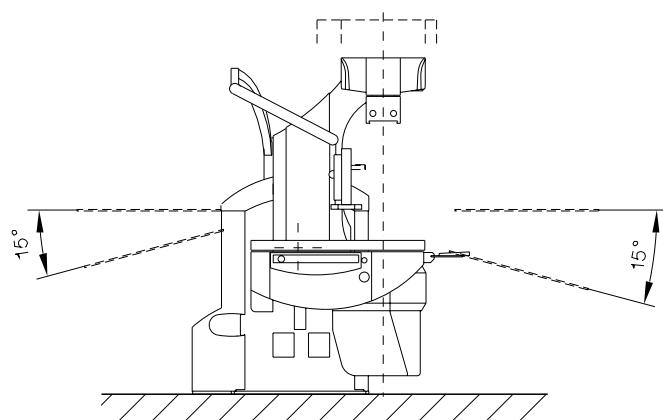
*4	RH with limitation of unit movement	≥ 2500 2501-2799
	RH without limitation of unit movement	≥ 2800

Installation of the Tabletop Extension

UROSKOP Access, left-hand version



UROSKOP Access, right-hand version

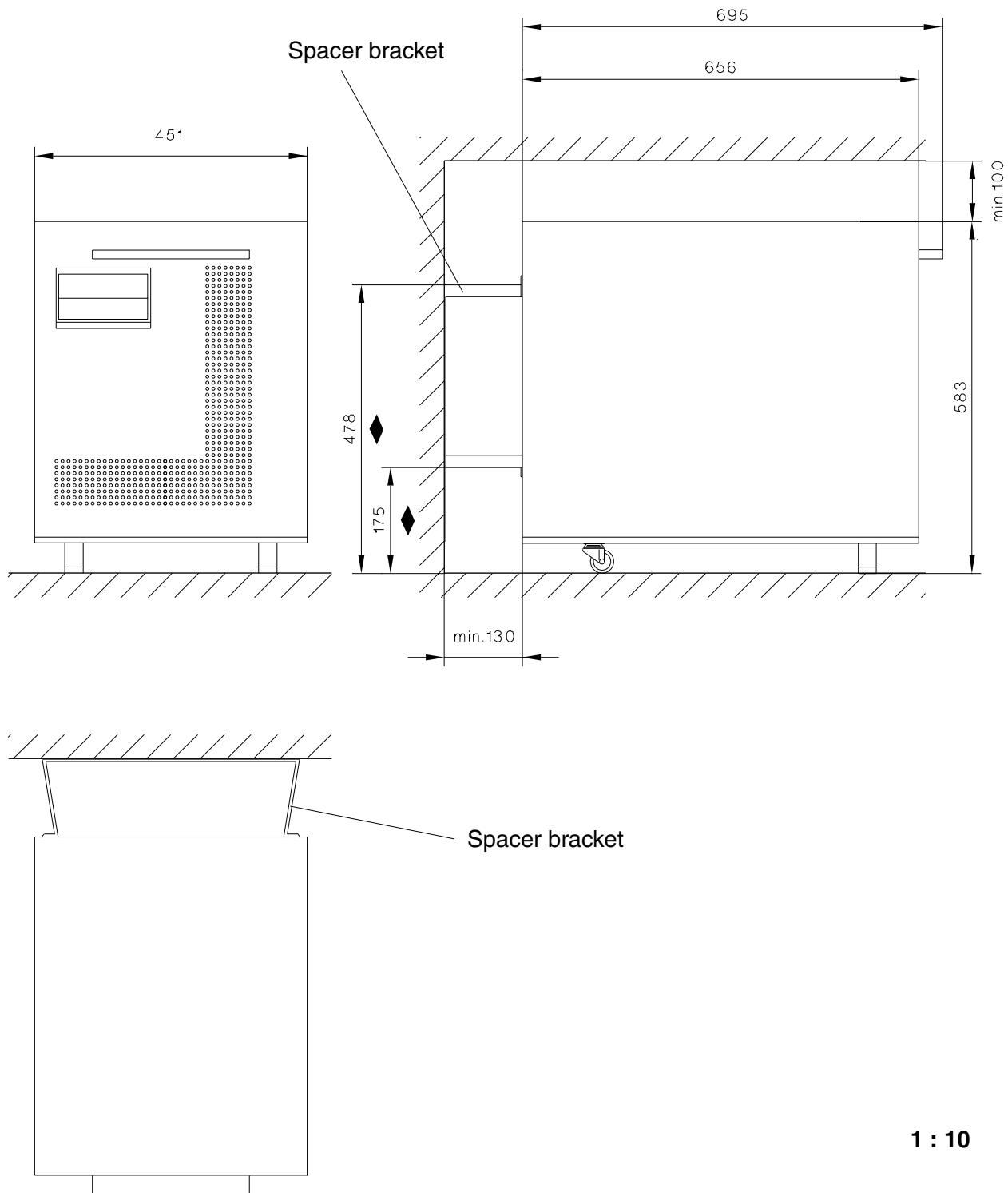


1 : 50

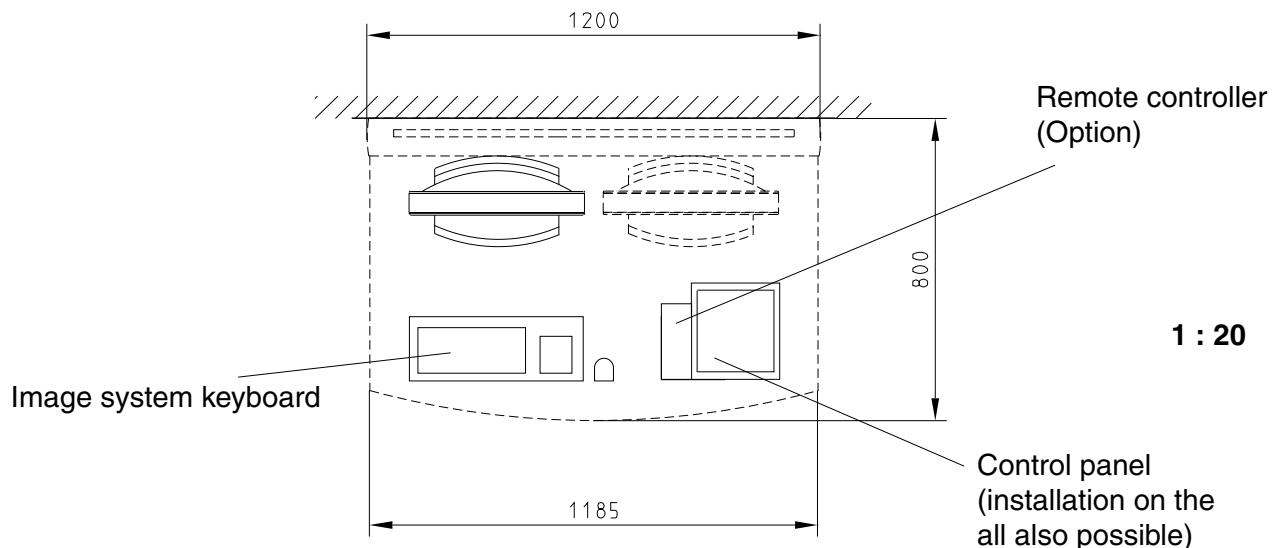
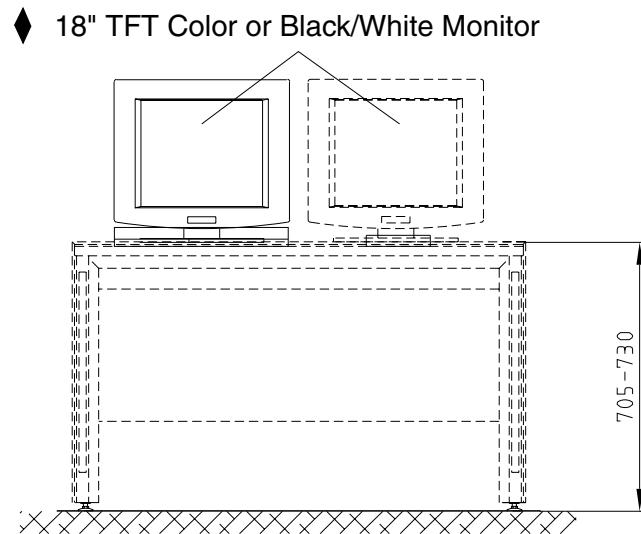
NOTE

When the tabletop extension is installed, table tilt may only be in the range of ±15°, see also the User Instructions.

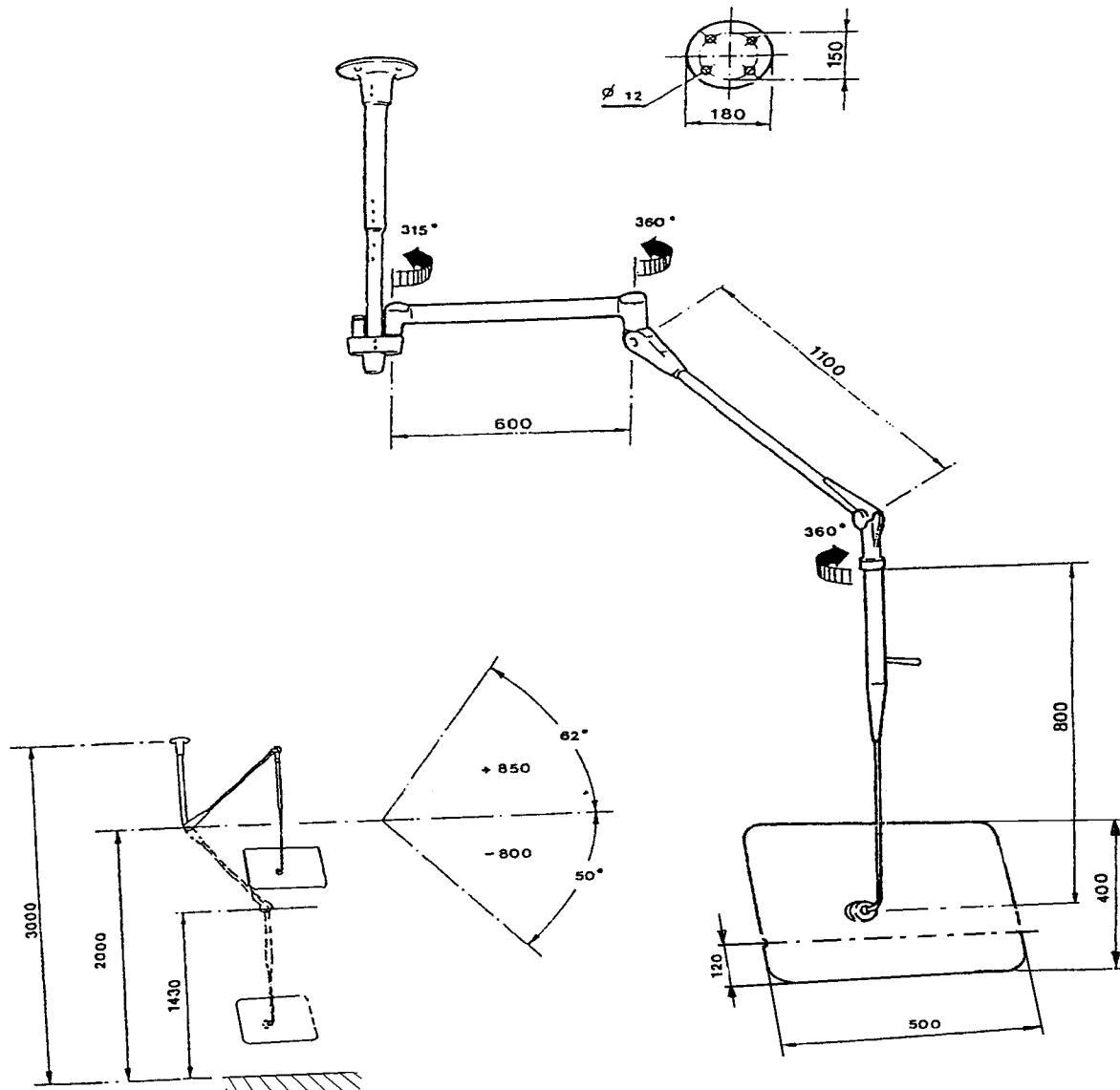
Image System



System Console (Option)



Upper Body Radiation Shield (Option)

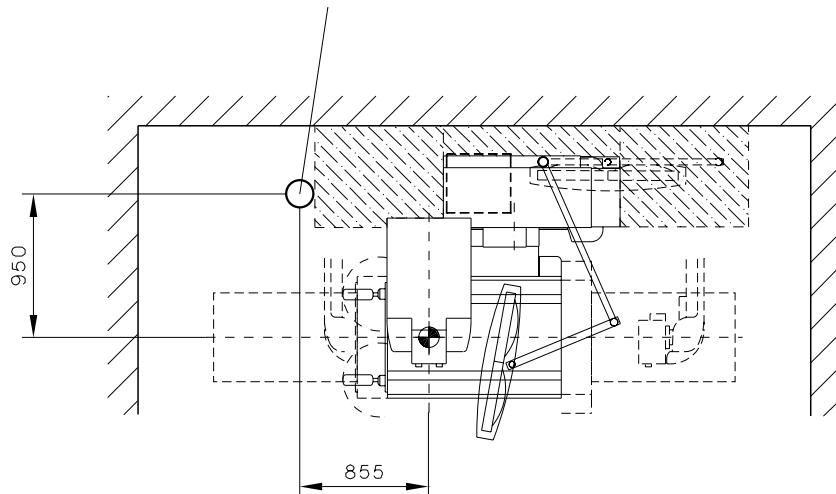


Weight approx. 45 kg

Upper Body Radiation Shield (Option)

Ceiling Fixpoint

For ceiling flange, see page 2-8
On-site mounting



The following lengths of the stand columns are available:

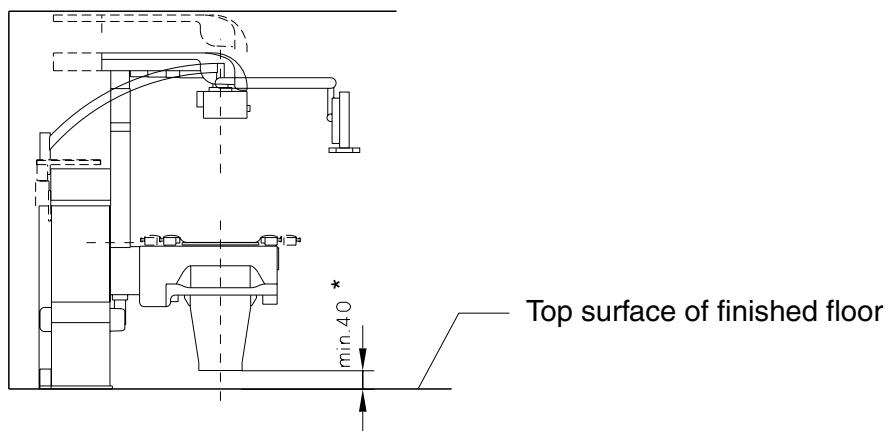
Stand Column	Room Height
460 mm	$\geq 2500 - 2800$ mm
850 mm	≥ 2850 mm

This page intentionally left blank.

Installation Notes

General Remarks

- The unit must be installed on a solid base with sufficient load bearing capacity, e.g. concrete. If self-leveling grout has the required load bearing capacity, it can also be installed directly on self-leveling grout. If there is appropriate on-site subconstruction, the unit can also be installed on computer flooring.
- Other types of floors without sufficient load bearing capacity must first be removed.
- If the unit is not brought into the room by a service contractor (outside of Europe / overseas), the transport castor set, Part No. 11 53 654 must be ordered in advance.



- * Safety distance between unit and top surface of finished floor.

NOTE **A drilling template is included in the shipment**

NOTE **For the distance between the generator cabinet cover panel and the ceiling, make sure that the heated air can be vented without restriction and that no air blockage is created.**

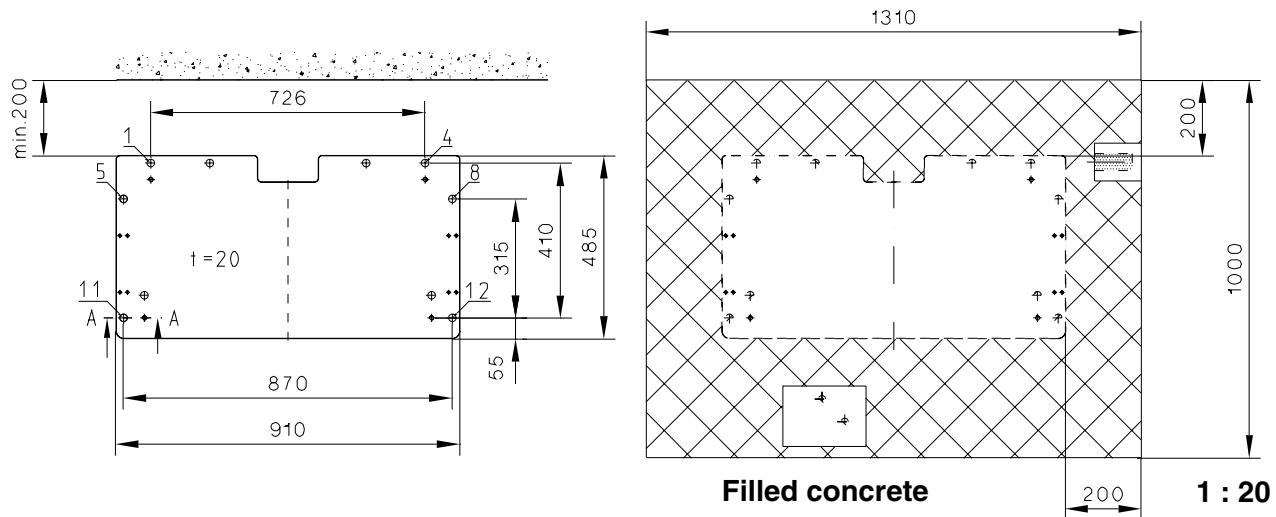
General Remarks

- Lay the ground wire parallel to the power cable.
- The power cable shielding must be connected in the electronics cabinet with Gnd in the shortest possible path.

System-external Power Cables

- Lay separately with adequate spacing (min. 1 m distance).
- Also use shielded cables.

◆ Unit Base Static Requirements (Left-hand Version)



◆ Pull and Compression Forces in kN

Mounting point	1	4	5	8	11	12
Pull	3.5	4.1	1.1	4.0		
Compression					12.1	8.4

The numbered holes are mounting holes for the unit base. This is where the above-listed forces are exerted.

The adjacent holes are alternate holes. Hilti heavy duty expansion bolts are included in the shipment

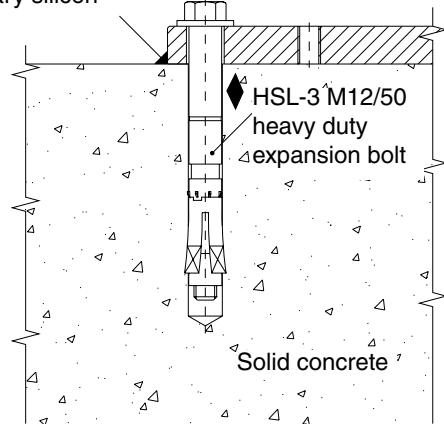
- ◆ HSL-3 M12/50 (6x)
- ◆ HSL-3-G M12/100 (6x)

The specifications and instructions of the manufacturer must be observed.

The unit base must be leveled to 1 mm/m

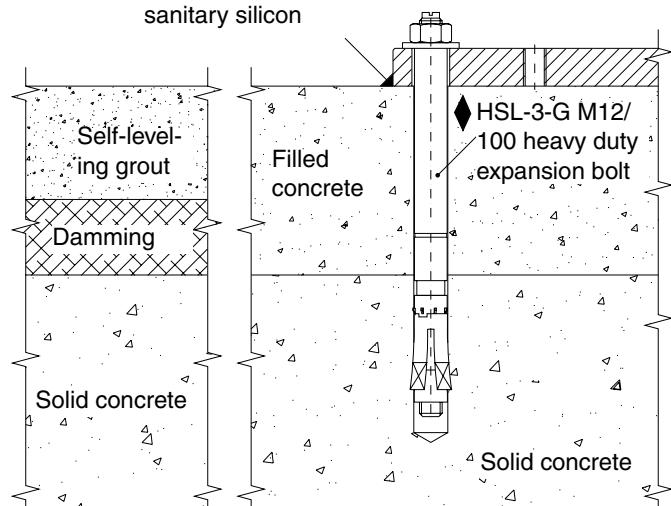
Installation on solid concrete A - A

Caulk all around with
sanitary silicon

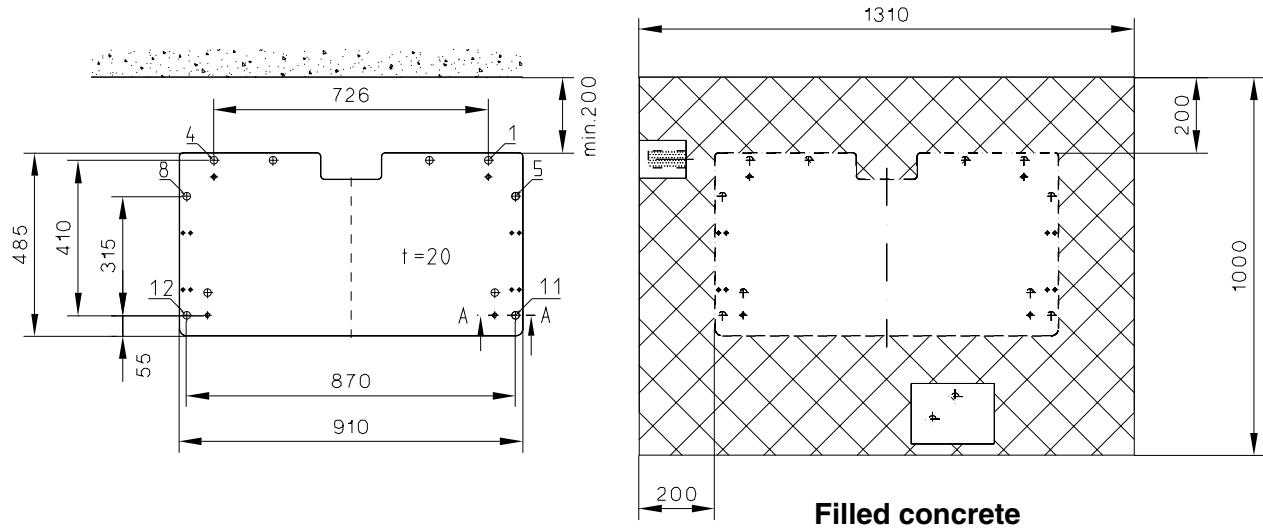


Installation on filled concrete A - A

Caulk all around with
sanitary silicon



◆ Unit Base Static Requirements (Right-hand Version)



1 : 20

◆ Pull and Compression Forces in kN

Mounting Point	1	4	5	8	11	12
Pull	4.1	3.5	4.0	1.1		
Compression					8.4	12.1

The numbered holes are mounting holes for the unit base. This is where the above listed forces are exerted.

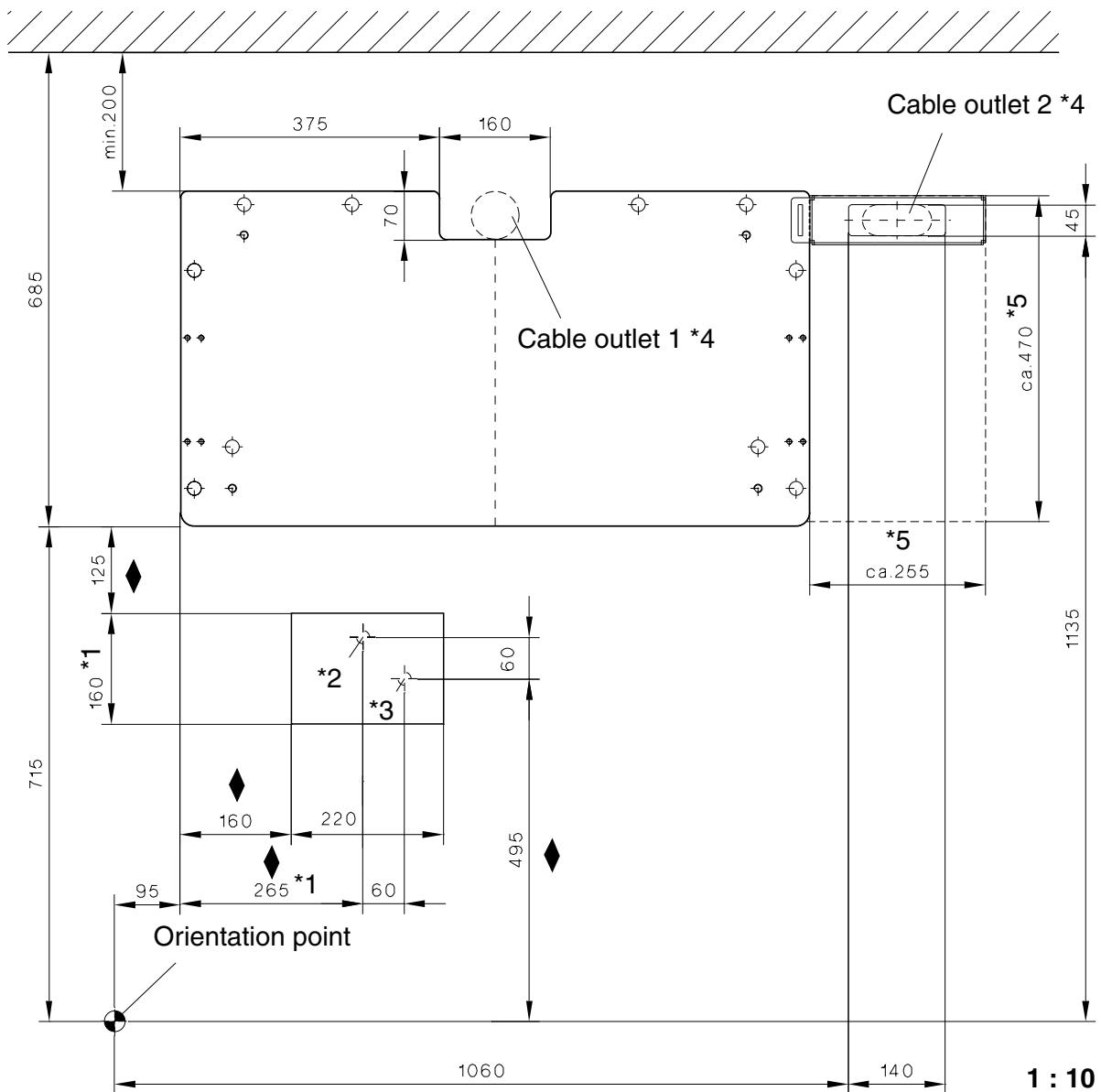
The adjacent holes are alternate holes. Hilti heavy duty expansion bolts are included in the shipment

- ◆ HSL-3 M12/50 (6x)
- ◆ HSL-3-G M12/100 (6x)

The specifications and instructions of the manufacturer must be observed.

The unit base must be leveled to 1 mm/m.

On-site Installation Shaft, Cable Fixpoints for Water Installation, Cable Outlets (Left-hand Version)



*1 Installation shaft for on-site water installation, see Page 3-5

*2 Fixpoint for on-site water intake

*3 Fixpoint for on-site water outflow

*4 Cable outlet:

- 1.) Preferable
- 2.) Alternative
(only if Version 1 is not possible)
if needed, provide a center hole

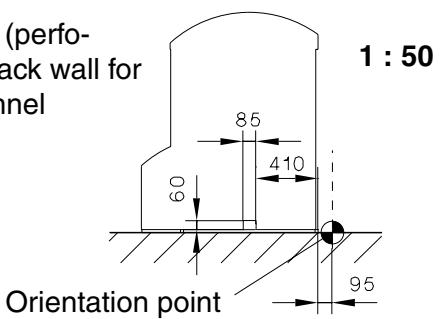
*5 Also remove the floor covering (if present) in the area of the transformer tank

UROSKOP Access

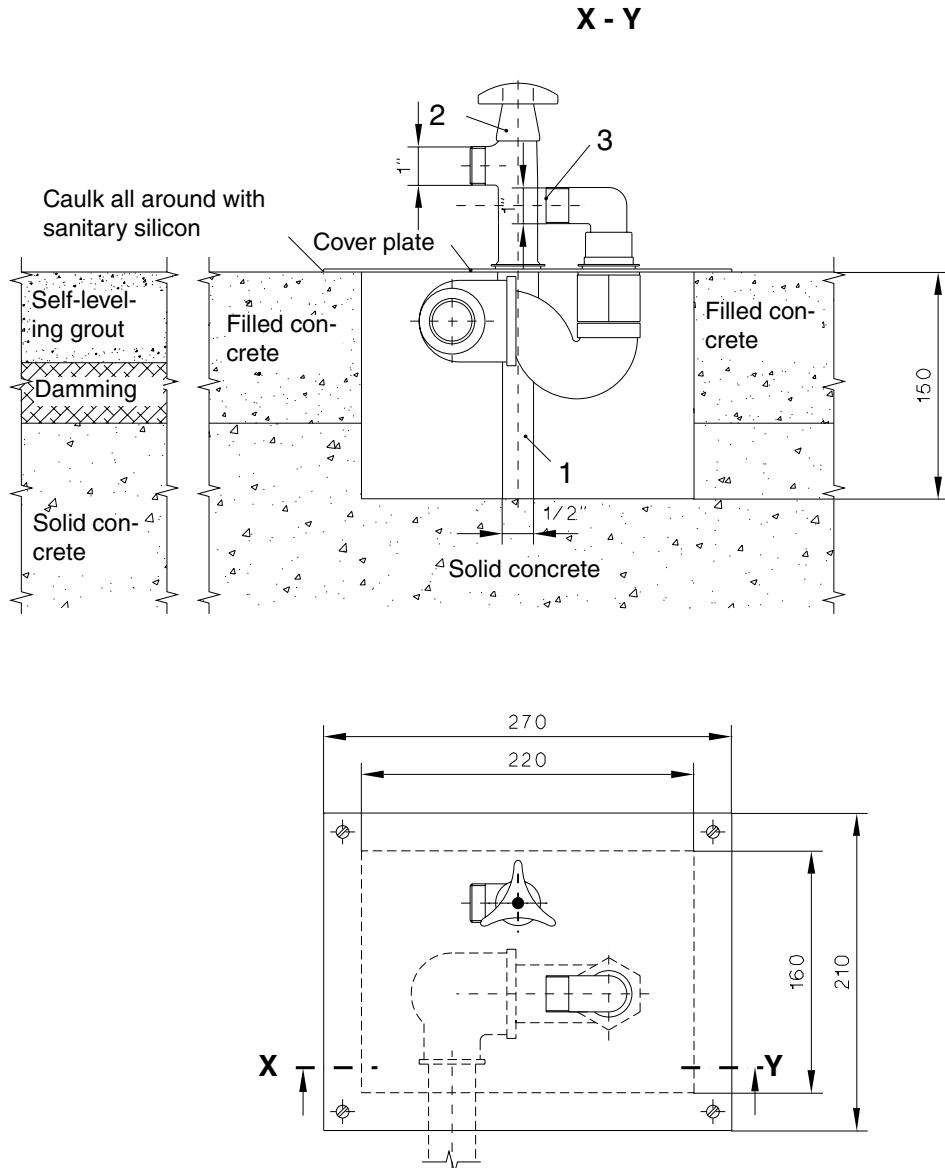
Rear view

Knock-out (perforated) in back wall for cable channel

1 : 50



◆ Water Installation (On-site), Left-hand Version

**NOTE**

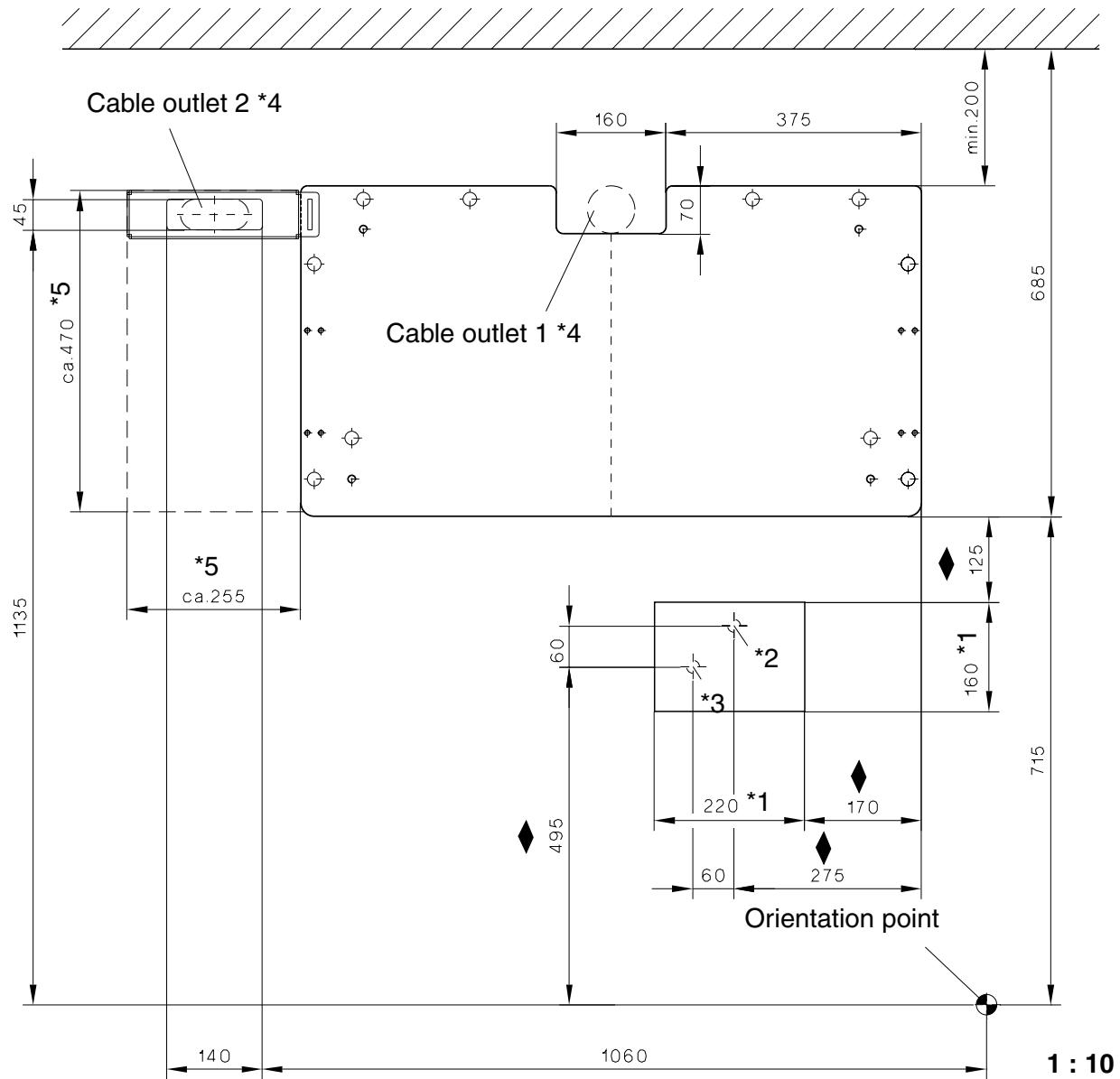
When cutting out concrete and self-leveling grout, take note of static requirements!

For an explanation of 1-3, see page 3-6

Intrusion of foreign substances into the drinking water supply must be ruled out. The legal regulations of the countries as well as local regulations must be observed.

		Connec- tion Thread	Function	Remark
1	Water connection (Cold water, house- hold connection)	1/2"	Always required with connec- tion of a rinse basin (optional: to rinse out the uro collection bag).	
2	Shut-off valve	1"	Required for connection of the rinse basin/uro collection bag.	
3	Water drain	1"	Required for connection of the rinse basin/uro collection bag.	Install an adapter (1" connec- tor thread) on-site for connec- tion of the uro collection bag to the water drain.

On-site Installation Shaft, Cable Fixpoints for Water Installation, Cable Outlets (Right-hand Version)



*1 Installation shaft for on-site water installation, see Page 3-7

*2 Fixpoint for on-site water intake

*3 Fixpoint for on-site water outflow

*4 Cable outlet:

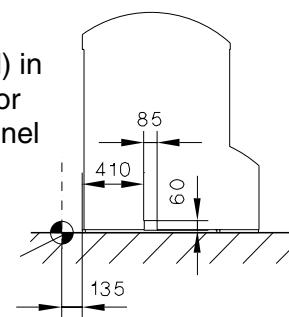
- 1.) Preferable
- 2.) Alternative
(only if Version 1 is not possible)
if needed, provide a center hole

*5 Also remove the floor covering (is present) in the area of the transformer tank.

UROSKOP Access

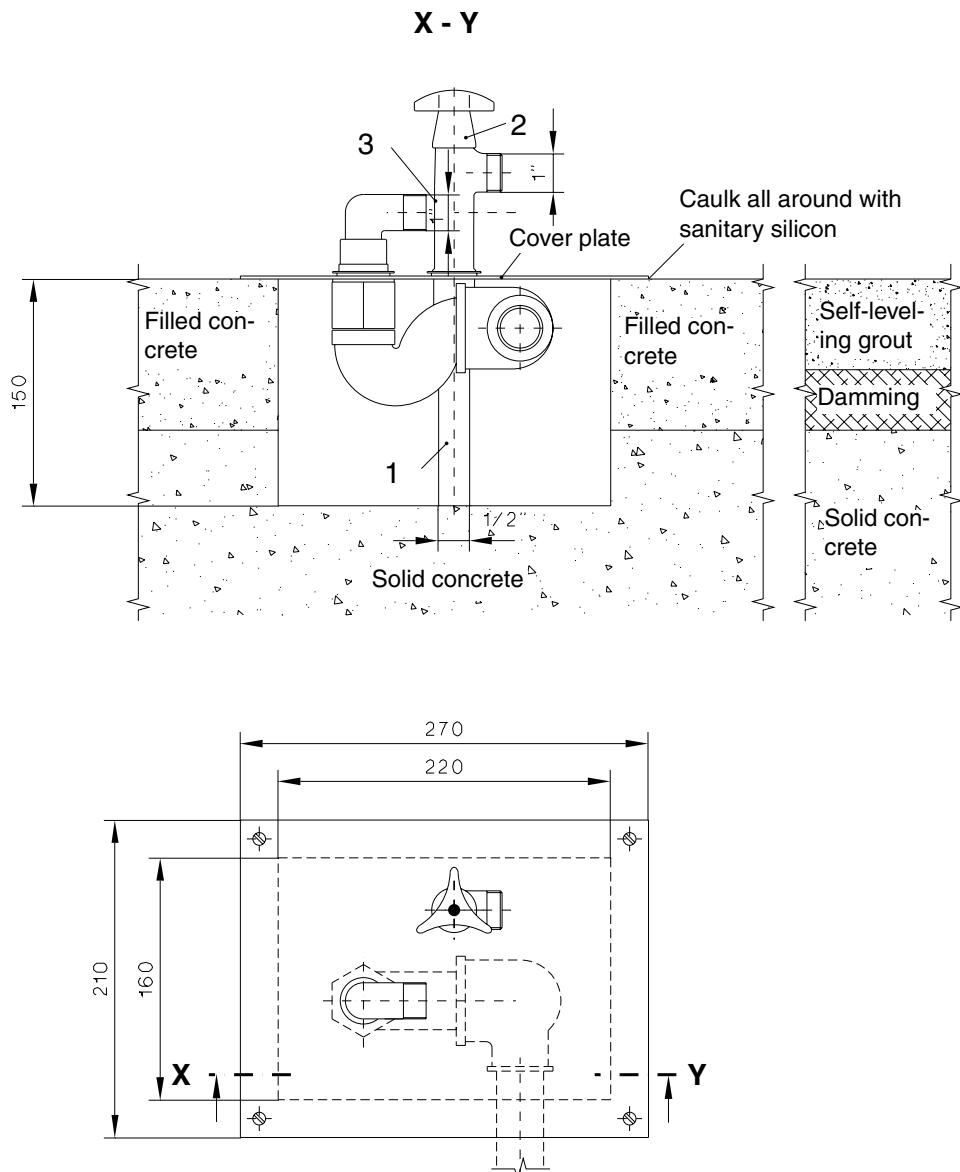
Rear view

Knock-out
(perforated) in
back wall for
cable channel



Orientation
point

◆ Water Installation (On-site), Right-hand Version



NOTE

When cutting out concrete and self-leveling grout, take note of static requirements!

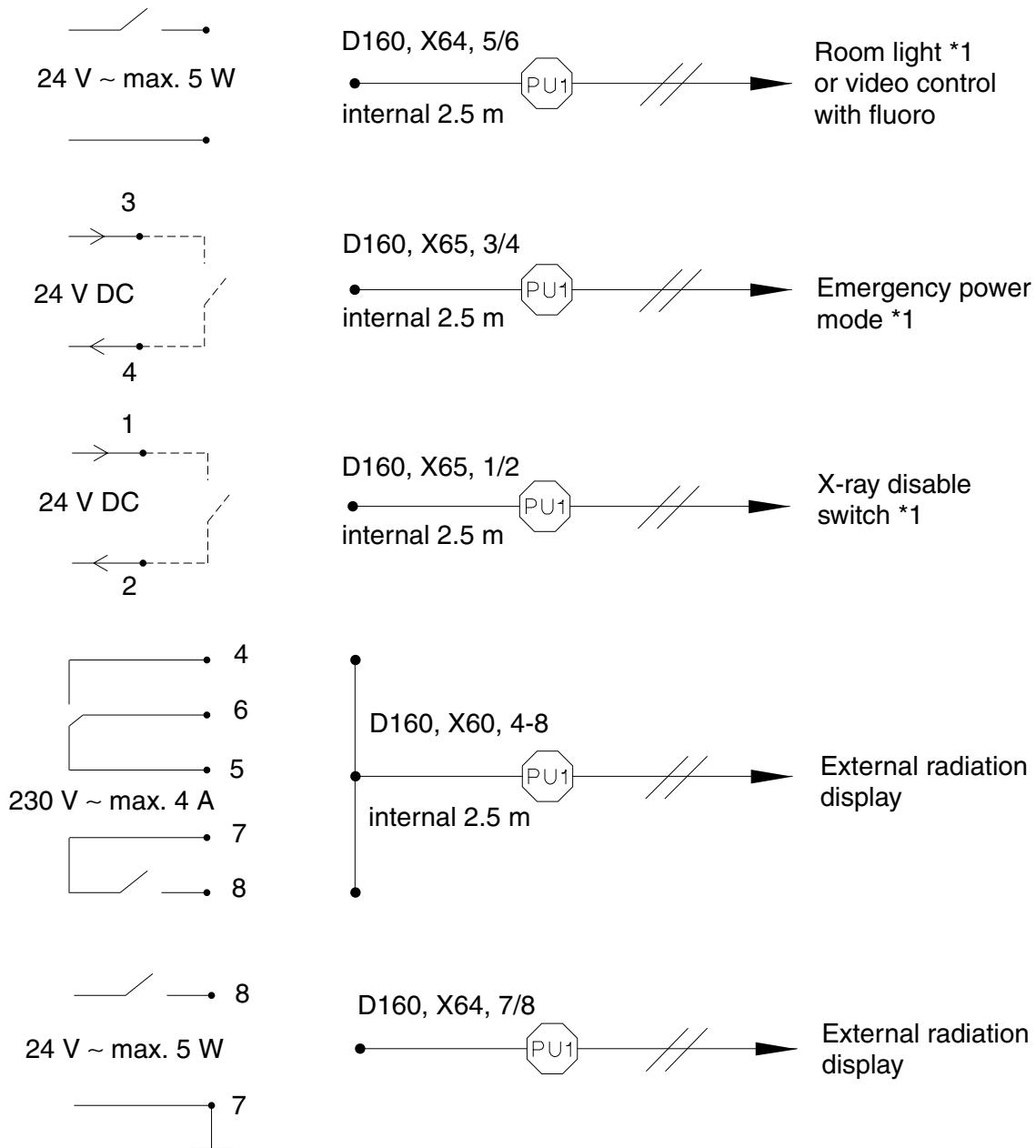
For an explanation of 1-3, see page 3-9

Intrusion of foreign substances into the drinking water supply must be ruled out. The legal regulations of the countries as well as local regulations must be observed.



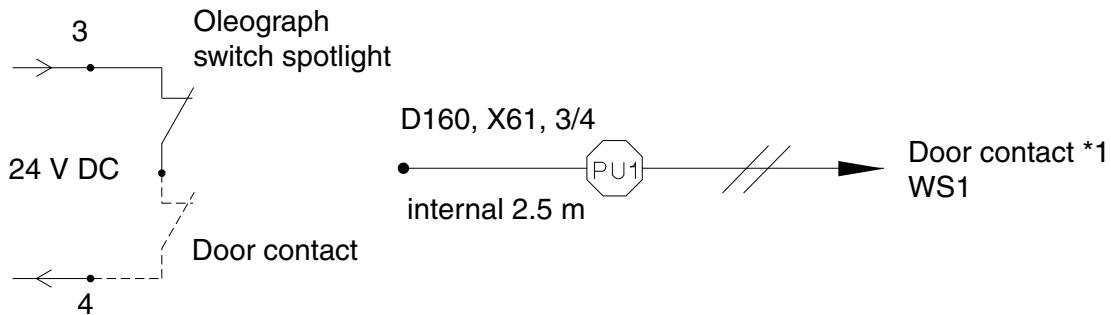
		Connec- tor Thread	Function	Remark
1	Water connector (Cold water household connection)	1/2"	Always required for connec- tion of a rinse basin (optional: to rinse out the uro collection bag).	
2	Shut-off valve	1"	Required for connection of the rinse basin/uro collection bag.	
3	Water drain	1"	Required for connection of the rinse basin/uro collection bag.	Install an adapter (1" connec- tor thread) on-site for con- nection of the uro collection bag to the water drain.

◆ Contacts in PL-SX 65/80 Generator Cabinet for External Connections



*1 Voltage conducting outputs from generator

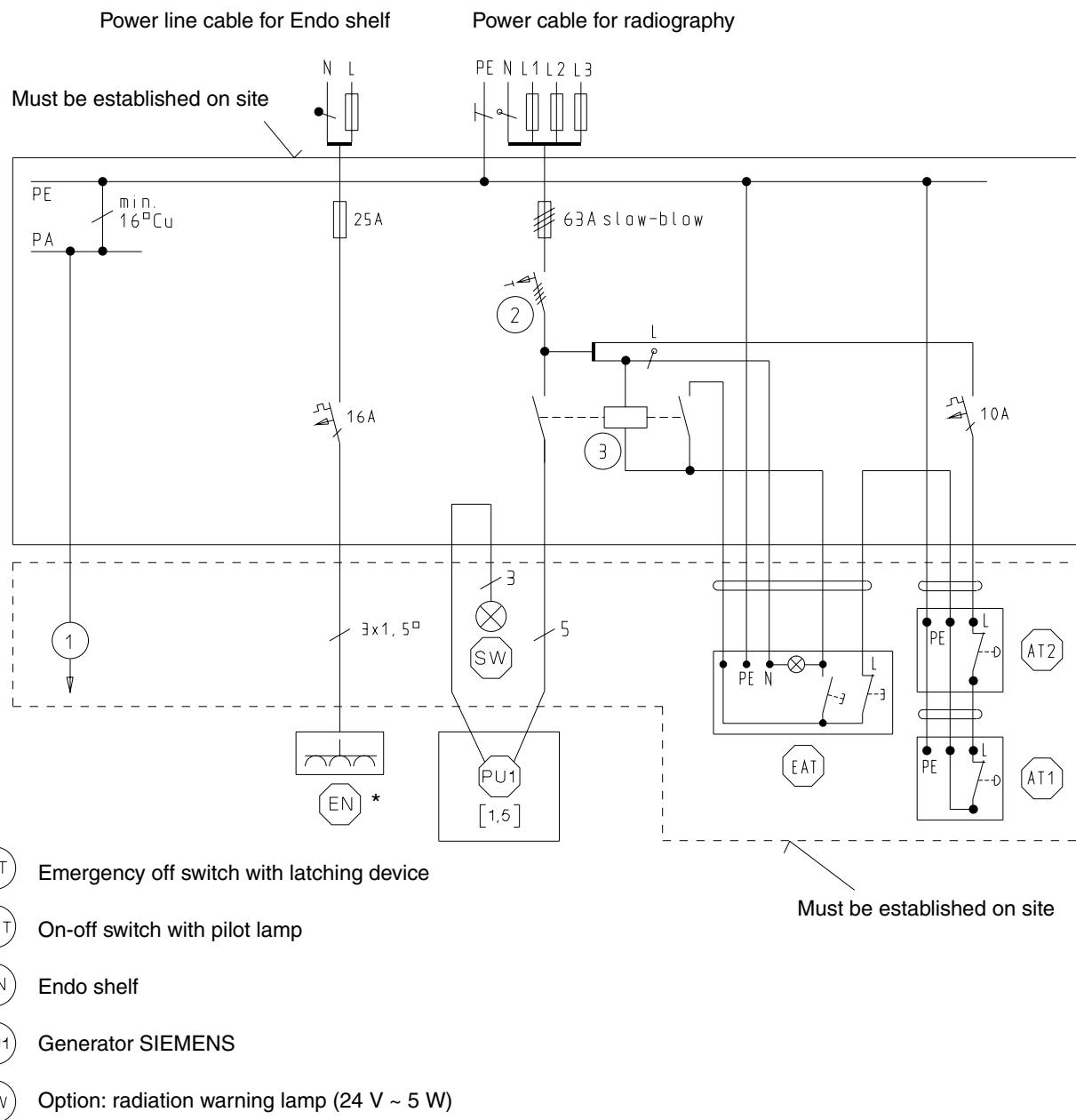
◆ Contacts in PL-SX 65/80 Generator Cabinet for External Connections



*1 Voltage conducting outputs from generator

On-site Electrical Installation

Recommendation for on-site power distributor per DIN VDE 0100-710 or national regulations



Text, see page 3-11

NOTE

Authorized customer service personnel from the camera manufacturer are responsible for adjusting the endoscopy camera.

- 1 To external conductive parts
- 2 Per DIN EN 50178 Classification VDE 0160, "Equipping of High Voltage Systems with Electronic Operating Devices" the following GFI switches must be used exclusively:
With $U(N) = 3 \sim 400/415 \text{ V}$; $I(N) = 63 \text{ A}$, $IdN = 30 \text{ mA}$ for AC and pulsed as well as smooth DC fault currents.
 - Order from electrical supply house, Order No. FI 5SZ3 466 0KG05, all-current sensitive
 - Order from SPH2, Part No. 49 54 470 Y7933
 - (Width of GFI switch is 144 mm = 8TE, installation on standard rails)

For countries in which this standard does not apply, the following GFI switches can be used for voltages of $> 415 \text{ V}$:

With $U(N) > 3 \sim 415 \text{ V}$; $I(N) = 125 \text{ A}$, $IdN = 30 \text{ mA}$

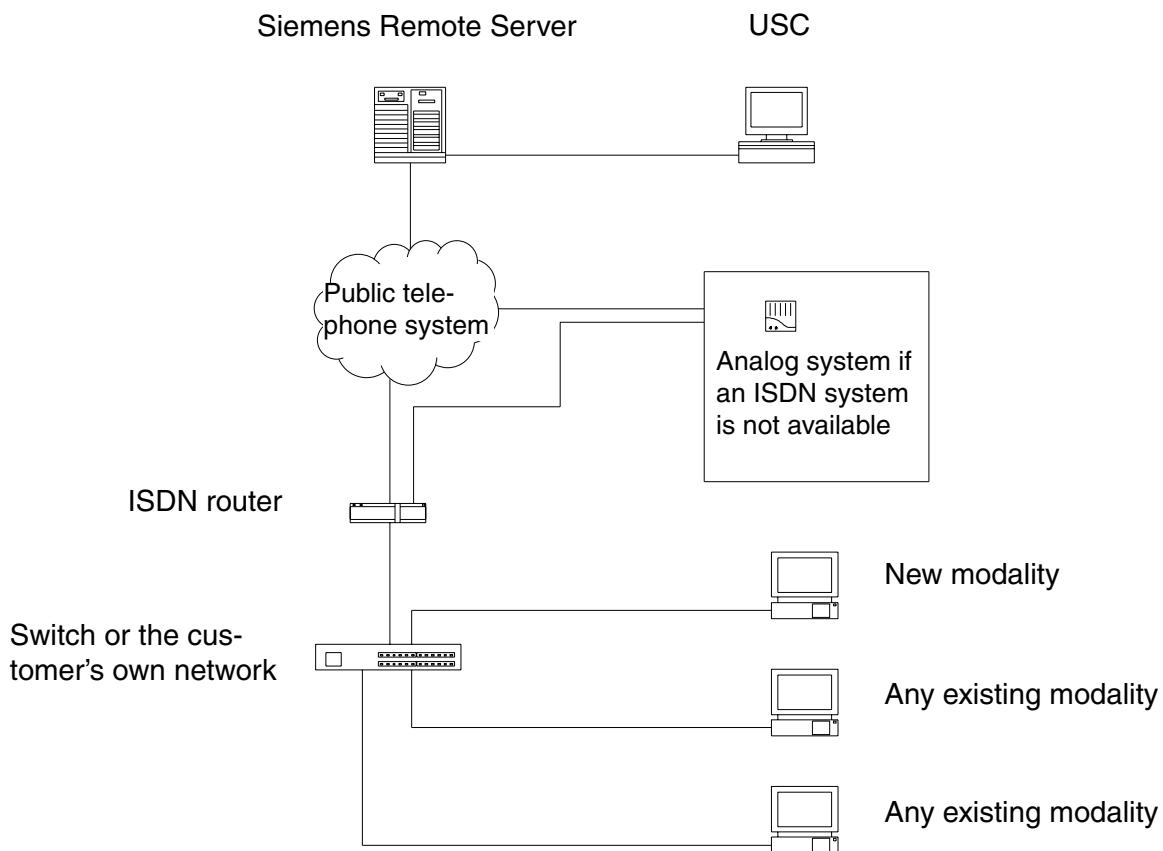
- Doepke-Norden (order from SPH2, Part No. 51 41 168 Y7933)

- 3 System breaker
- 4 Option: radiation warning lamp (24 V \sim 5 W)

[] Numbers are free cable lengths in m

* Connection per the operator's applicable local regulations. The cable must be securely connected at the line power input side. No life-sustaining systems may be connected. A cable with 20 m ($3 \times 1.5 \text{ mm}^2$) is contained in the Endo shelf shipment.

SIEMENS Remote Service™ (SRS)



Remote diagnosis and "Proactive Event Management" require remote LAN access to our systems. For this, a router is required that we provide for our customers during the warranty period and afterward with conclusion of a service contract at no charge.

The router remains the property of Siemens AG. The required telephone connection (preferably ISDN) and the local power supply must be made available on site. Even if several Siemens systems are connected to the same data net, only one central router is needed.

Of course in the framework of remote diagnostics, we observe the confidentiality of patient data and have taken protective measures against access to it. Further information on the topic of data security can be found in the system-specific publications.

NOTE

For detailed information about SIEMENS Remote Services™ (SRS),
see PG TDIT-000.891.01...

Can be found on the Intranet under: CS/ForService/ProductInformation/Planning/General ...

The virus protection hospital network

Different networks have completely different security requirements. Each network must be evaluated separately, in order to develop an effective security policy. We recommend a corresponding virus protection to establish.

DICOM

For detailed information about DICOM, see PG TDIT-000.891.02...

◆ Can be found on the Intranet under: CS/ForService/ProductInformation/Planning/General ...

This page intentionally left blank.

Remarks Regarding Laying Cables

Recommendation for Laying Cables

Width of cable channel >200 mm

Depth of cable channel 60 mm

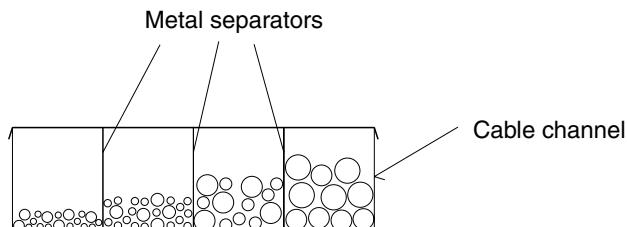
If there are cross-overs, it may be necessary to provide for deeper cable channels

Lay the high voltage cables and power cables separately from control cables and video cables.
(If possible, provide shielding measures).

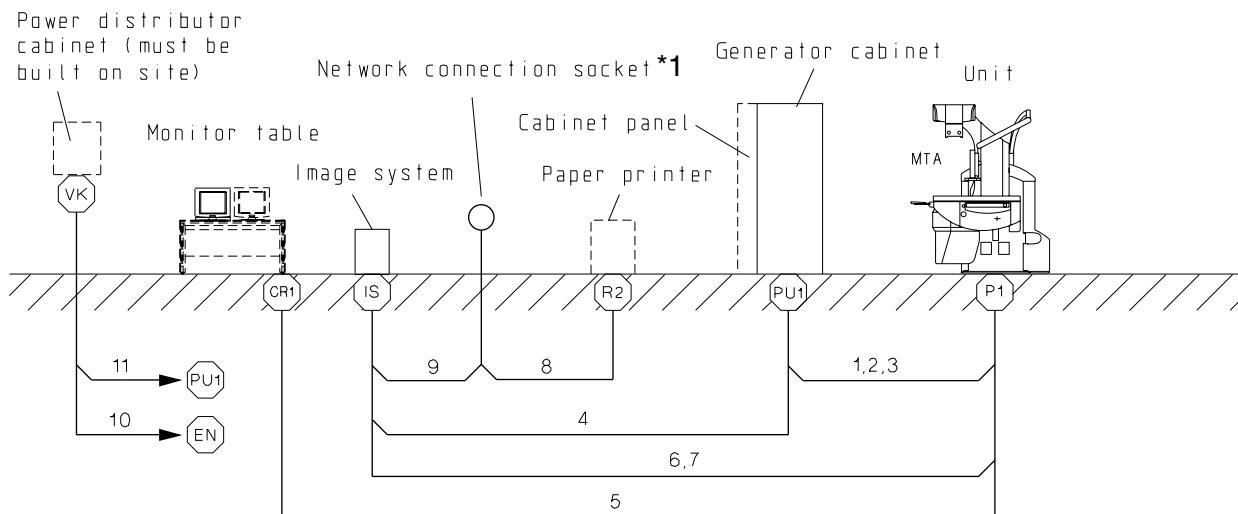
Absolutely observe:

Avoid creating cable loops, avoid cable cross-overs.

- Lay cables in separate conduits or closed cable channels
- If cables are laid in open cable channels, lay cables separately using metal separators or similar device.



◆ Overview of Fixpoints, UROSKOP Access



NOTE

*1 If the image system is connected to a network connection socket, the connection cable included in the shipment must be used.

NOTE

Store excess cable lengths behind the cabinet panel on the side of the generator cabinet.

◆ Fixpoint List, UROSKOP Access

Wiring harness No.	from Fixpoint	to Fixpoint	Cable channel diameter in mm ²	Conduit, space in inches	Minimum opening in mm	Maximum fixpoint distance in m	Remark
1	P1	PU1	3125	2 1/2-3	Ø 63-75	15	2 x high voltage cable + control cable; W100
2	P1	PU1	780	2 1/2	Ø 63	15	W150
3	P1	PU1	3125	3	Ø 75	15	W400
4	IS	PU1	2000	2	Ø 50	18	W600
5	CR1	P1	280	3	Ø 75	20	W360
6	P (MTA)	IS	780	1 1/2	Ø 38	18	W650
7	P1	IS	125	2	Ø 50	18	Camera cable X10 (CCD camera)
8	Network connection socket	R2	—	—	—	—	Delivery depends on manufacturer of the paper printer
9	Network connection socket	IS	140	1	14 x 10	4	Network connection socket
10	VK	EN	125	1	Ø 10	15	Endo shelf (option) shipped length 20 m (3 x 1.5 mm ²)
11	VK	PU1	—	—	—	—	Power cable, on-site

◆ List of Fixpoints Used

Fixpoint	Subsystem	Remark
CR1	Monitor table	Floor fixpoint
EN	Endo shelf	Mounting point on Endo shelf
IS	Image system	Floor fixpoint
MTA	TFT monitor support arm	Floor fixpoint Cables are laid via fixpoint P1
P1	Unit	Floor fixpoint
PU1	Generator	Floor fixpoint
R2	Paper printer	Floor fixpoint
VK	Power distribution cabinet (on-site)	Wall fixpoint

This page intentionally left blank.

Electrical Data

	Power Line Connection	Power Consumption, overall:		Fusing, internal
		Fluoroscopy	Exposure	
UROSKOP Access (System) *1	3/N/Gnd, ~ 400/440/480 V, ± 10% 50/60 Hz, ± 1 Hz	3.3 kVA	max. 145 kVA	50 A slow-blow

*1 corresponds to the power data of the PL SX 65/80 generator for 80 kW

The Unit is designed:

- for a power supply net with grounded star point (central point of a star-shaped power supply net), other words:
- the external conductor may not be grounded;
- the net may not be potential-free.

Weights and Heat Dissipation

	Weight [kg]	Heat Dissipation [W]
UROSKOP Access	approx. 1250	500
Control console for UROSKOP Access	max. 5	n.a.
Image system	approx. 80	900
TFT-Monitor 17" Color (on support arm)	approx. 6	approx. 70
18" TFT Color and Black/White Monitor (on table)	approx. 9	approx. 70

Environmental Conditions

UROSKOP Access	Operation	Transport	Storage
Adm. ambient temperature	+ 10° ... + 35° C	- 20° ... + 60° C	- 20° ... + 60° C
Adm. rel. humidity	15% ... 75%	10% ... 95%	10% ... 95%
Adm. air pressure	700 hPa ... 1060 hPa	700 hPa ... 1060 hPa	700 hPa ... 1060 hPa

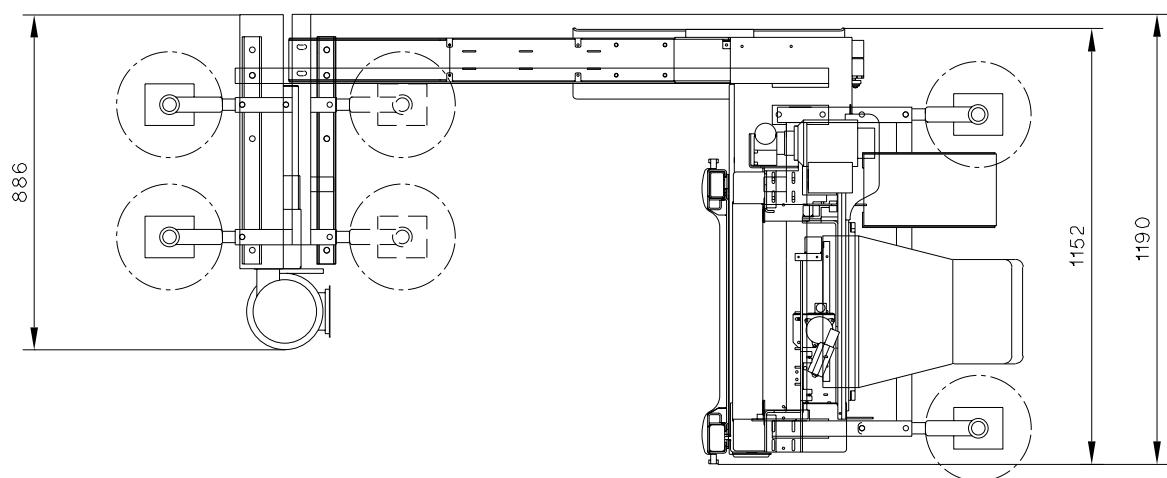
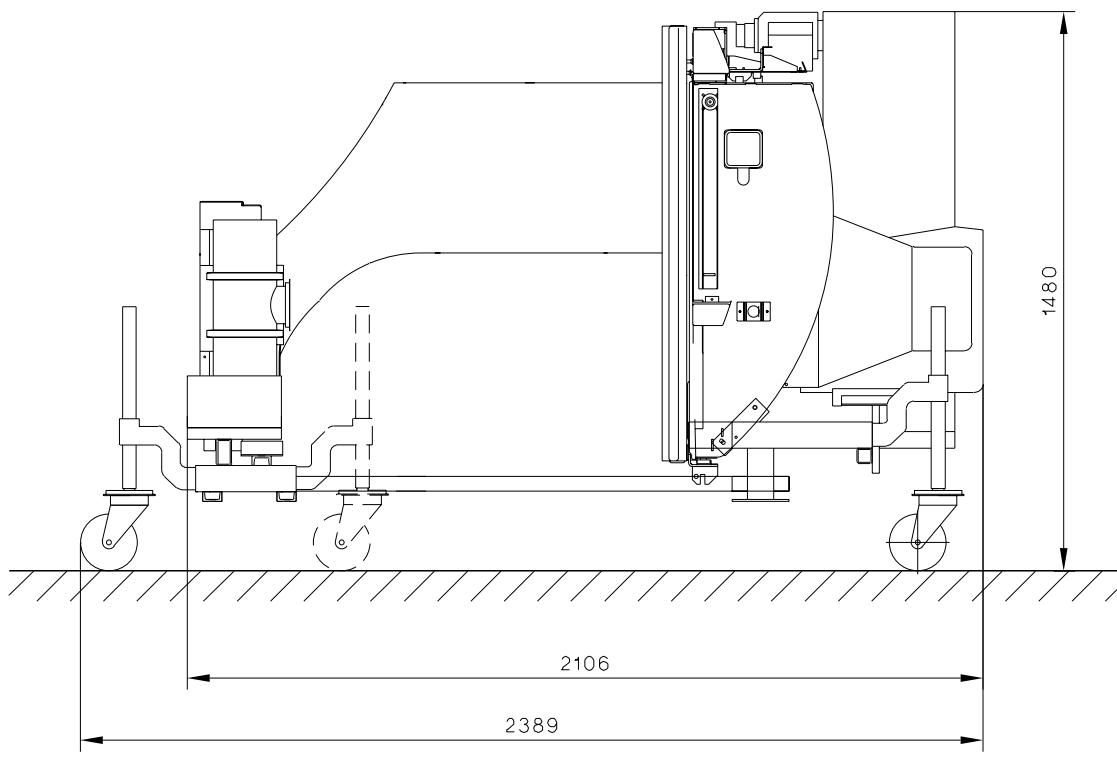
◆ Packaging and Transport Routes

	Unit Support	Base
Largest crate	L 2355 x W 1280 x H 1650 mm	L 1730 x W 1000 x H 1700 mm
Heaviest single part	approx. 570 kg	approx. 660 kg
Min. door width	min. 1200 mm	min. 920 mm
Min. freight elevator size (with transport carriage and transport castors)	L 2400 x W 1250 x H 1500 mm	L 2000 x W 1000 x H 1700 mm
Largest single part without packaging (with transport cas- tors)	L 2390 x W 1190 x H 1480 mm	L 1850 x W 900 x H 1600 mm

◆ Surface Paint Colors

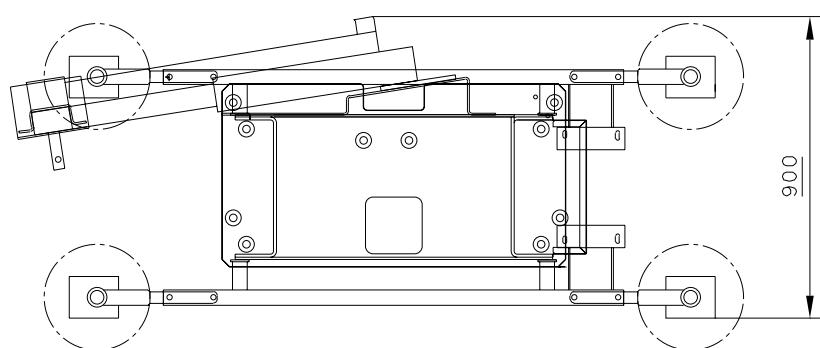
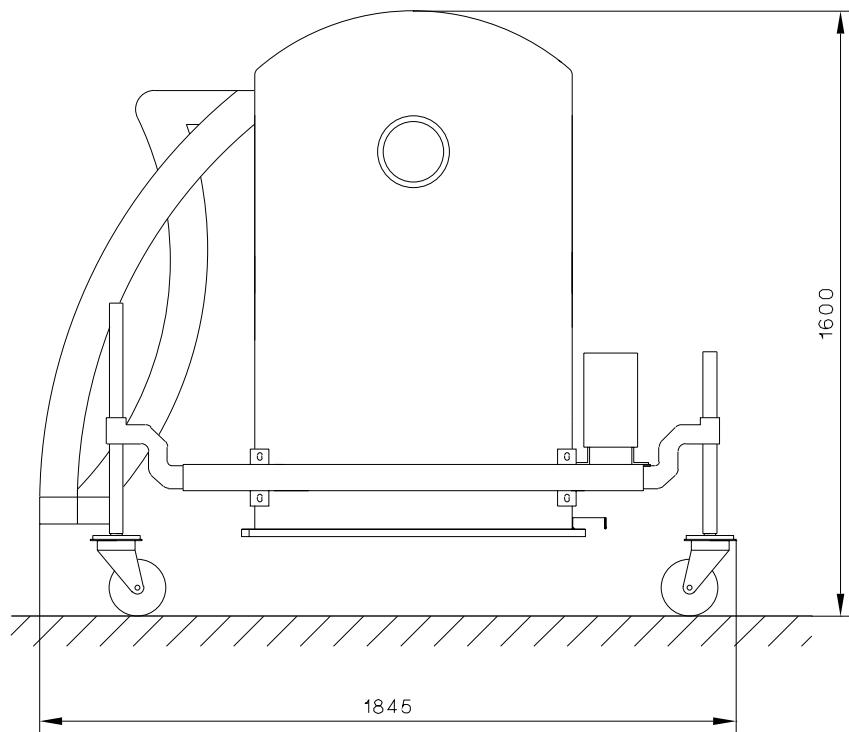
Primary color	Medical White C610
Combination color	Medical Blue C750 Light Basic C700

Transport Carriage (Unit Support)



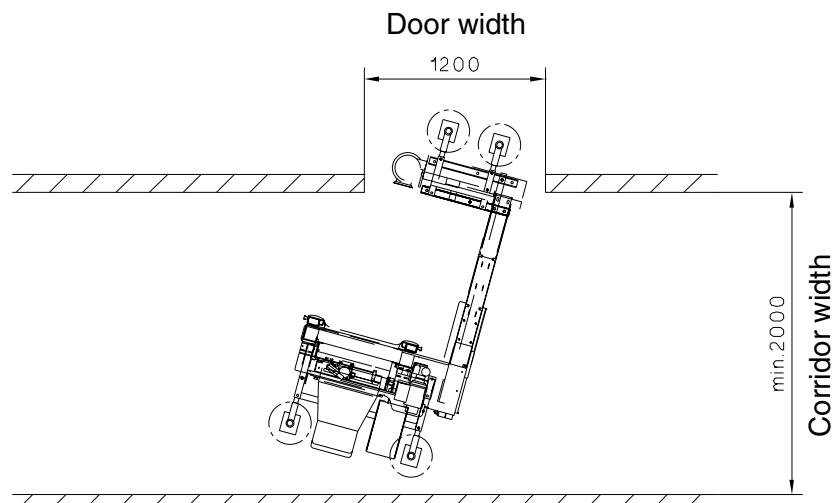
1 : 20

◆ Transport Carriage (Base)



1 : 20

Transport Route



1 : 50

This page intentionally left blank.

Chapter	Page	Change
0 - 7		Rev. level of document changed from 05 to 06.
2	2-1 and 2-2	Text updated.
2	2-6	Dimensions added.
2	2-7	Text updated.
3	3-2 and 3-3	Drawing and text updated. Speed Info 002/2003/SP integrated into text.
3	3-4 and 3-7	Drawing and text updated. Speed Info 002/2003/SP integrated into text.
3	3-5, 3-6, 3-8 and 3-9	Drawing and text updated, resulting in a shift of the following pages.
3	3-10 and 3-11	Drawings and fixpoints updated.
3	3-12	Drawing, text and fixpoints updated.
3	3-13	Text updated.
3	3-14	Note text updated.
3	3-15	DICOM, text updated.
4	4-2	Overview of Fixpoints and text updated.
4	4-3	Fixpoint List and List of Fixpoints updated.
5	5-1	Weights and heat dissipation updated.
5	5-2	Packaging and Transport Routes, paint colors updated.
6	6-2	Transport carriage dimensions updated.
7	7-1	Changes to Previous Version updated.

This page intentionally left blank.